CDF Tulare Unit

Fire Management Plan
2004

Education, Engineering, Enforcement, Pre-Fire Planning, Fire Safe Council, Vegetation Management, Volunteers in Prevention

CDF Tulare Unit

Fire Management Plan

2004

Approved By:

David B. Hillman, Tulare Unit Chief, _____

California Department of Forestry & Fire Protection

Tulare County Fire Department

Johnathon P. Wagy, Chairperson _____

Tulare County Fire Safe Council

Rob Stone, Pre Fire Engineer _____

California Department of Forestry & Fire Protection

State of California
The Resources Agency

M e m o r a n d u m

To: Tim Turner, Region Chief
California Department of Forestry and Fire Protection
Southern Region

Date: August 24, 2004
Telephone: (559) 732-5954
Website: www.fire.ca.gov

From: Dave Hillman, Chief
California Department of Forestry and Fire Protection
Southern Region - Tulare Unit

Subject: 2004 CDF / Tulare Units Fire Management Plan

Tulare Unit has completed the Fire Management Plan for July 2004. We are using the plan as our guide to reduce the risk of large damaging fires within the Unit, as well as catalog past, present, and future projects that not only look towards long range planning, but also act as a reminder to maintain pre-suppression infrastructure that has been in place for almost sixty years. This memorandum provides the status on where TUU is in terms of Fire Plan assessments, data validation, and its integration into daily operations. The following identifies the current status of Fire Management Plan issues:

- **Status of Fire Plan data layer validations and Assessments**
  * Fuels: *Completed*
  * Ignition Workload Analysis: *Completed*
  * Severe Fire Weather: *Not completed*, need RAWS adjustment to accurately validate.
  * Assets at Risk: *Completed*

  Fire Plan Assessment outputs are consistent with Unit Fire Plan staffs assessment of the priority areas.

- **Fire Plan Integration into Daily Operations**

  Projects identified in previous Fire Plans have cataloged projects completed and identified future projects. Our goal is to have an identified project being worked on within the field every day. The most affected areas include:

  * Camp Operations:
    Fire Management Plan activities account for ¼ of camp project work.
  * Field Battalion Operations:
    - Generate GPS data for pre-attack maps & accurate fire history.
    - Identify areas for fuel reduction projects.
    - Post education / information signs to get our message out.
    - Maintain TUU's Fire Control Road system which covers 168 miles.
- **Notable successes include:**
  ***** Lake Kaweah and Lake Success "Rat Trail" Project(s)
  - These fuel breaks contain road side ignitions annually.
  * GIS pre attack maps developed in the South Battalions greatly increase firefighter efficiency and safety.

- **Notable hindrances include:**
  ***** Delays in contract support
  - Difficult to coordinate project start dates
  - Cooperators lose interest and confidence
  - Opportunities and momentum are lost

  * Change of ownership and property splits on established and projected fuel reductions sites
  * Reliability of funding source
  - WUI grants
  * Staff support for current and prospective projects
  - GIS specialist
  - Grant coordinator
- **Key Fire Plan Players include:**
  ***** Chief, CDF Tulare Unit
  * Pre-Fire Engineer
  -Station FC GIS Specialist
  -PCF GIS Specialist
  * VMP Forester I
  * VIPs
- **Field Support**
  ***** Division Chief, Mountain Division
  * Division Chief, Mt. Home CC
  * Field Battalion Chiefs
  * Station Captains
- **Staff Support**
  ***** Division Chief, Administrative Officer
  * Region Pre-Fire Battalion Chief
  * Region Contracts staff
  * Sacramento Business Services

The Tulare Unit is taking active steps towards making the Fire Plan a relevant document while utilizing it to prevent large and damaging fires. A key element in the plans success will be to streamline the contract process to take advantage of cooperator interest, momentum, and on the ground opportunities. While we plan for and develop new projects, our primary focus will be to obtain funding for the maintenance of existing projects and pre-suppression infrastructure that is in place.

Tulare Units Fire Plan is in the process of undergoing a change to make this a working document that is useful to field personnel while incorporating data and technology that was previously unavailable. This transformation will require buy in and input from the field Battalions, but should make the Units Fire Plan goals and priorities clearly understood at all levels. Some of the changes will be recognizable in the 2004 plan, and others will be in subsequent future plans.

_____

David B. Hillman
Chief, CDF Tulare Unit
DH;rps

TABLE OF CONTENTS

Executive Summary

Tulare Unit is located in Central California and makes up part of the San Joaquin Valley. It consists of 888,723 acres of local responsibility which is protected by CDF under a Schedule "A" contract, 793,716 acres of state responsibility land under direct CDF protection, and 1,429,881 acres of lands under Federal Government Protection. The total of 3,112,320 acres, makes Tulare County the seventh largest county in area in the state. The Unit is bordered on the east by Sequoia and Kings Canyon National Parks, and the Sequoia National Forest. The counties of Kern, Kings and Fresno border to the South, West, and North respectively. Tulare Unit is divided into two Divisions and eight Battalions (four Schedule "A" and four Schedule "B"). There are nine state funded fire stations; 25 County funded fire stations, one air attack base, one 100-man conservation camp, and Mountain Home Demonstration State Forest.

The elevation of Tulare Unit land receiving direct protection by CDF ranges from 200 feet along the county's western boundary to a highest point of 9,300 feet on Moses Mountain to the East. The entire county elevations range from 200 feet on the West Side to the highest point in the contiguous United States, Mt. Whitney at 14,495 on the eastern boundary. This wide range of elevation supports many areas of vegetation consisting of grass, oak deciduous, oak persistent, brush, and timber.

The January 1, 2003 Department of Finances estimates Tulare County's population at 386,246. 145,128 of those people receive their fire protection from California Department of Forestry and Fire Protection / Tulare County Fire Department. Our dispatchers reported 14,022 responses last year averaging 38.4 calls a day (see chart in Appendix for last twenty years). The majority of the population in the state responsibility area is located along two east-west highways. Highway 198 which leads to the Sequoia / Kings Canyon National Parks and Highway 190 which accesses a significant portion of the Sequoia National Forest / Giant Sequoia National Monument. Tulare Unit continues to experience a population growth rate of approximately 1 percent annually. Fire occurrence spot maps indicate a direct relationship between use areas and fire occurrence. Along with the population increase, mountain areas have increased wildland urban intermix problems. Structures are being built throughout wildland areas wherein vegetation fires can spread. Providing adequate fire protection to those structures has become a major undertaking.

Tulare Unit's Fire Management Plan is our mechanism to catalog potential hazard areas and develop prescriptions to begin mitigating them based upon assessed priorities.

Pre-Fire Management: History indicates that it's not of matter of "if" we have a fire, but rather "when" we will have a fire. A good Pre-Fire Management Plan will allow us to prevent those fire starts from becoming large damaging fires. The common denominators for large wildfires are fuel, slope, weather, and assets at risk. We cannot change slope or weather but we can modify fuels and ensure that the individual homes and communities have a defendable space. All new homes being built are subject to PRC 4290 regulations which assist us in the defense of these newest additions to the watershed.

The first step is to identify the areas with the highest potential for a fire start to become a large fire (over 300 acres). Fire history in this Unit shows that many of the large fires occur in the same areas. Therefore, it would seem obvious that if all factors remain the same, the greatest potential for a large fire will be in the areas where they have burned before. By using the fire history map and overlying the assets at risk, we can determine priorities for projects.

After identifying the high risk areas, it is time to develop fire management projects to provide solutions to the problem areas. Some examples are:

1. Modifying the fuels in these areas for easier fire containment.
2. Maintain fire breaks from previous fires.

3. Maintain fuel breaks.
4. Look for areas to construct new firebreaks where fires have started.
5. Insure that homeowners create a defendable space around their homes and communities.
    a. Use Fire Safe Council's to conduct community presentations in an effort to assist in developing solutions for area specific problems.
    b. Create community action groups to be proactive in fire safe projects and work with the Fire Safe Councils.
    c. Increase PRC 4291 compliance where fuels and slope indicate the need for more than a 30' clearance to provide a realistic defendable space.
    d. Work with local cooperating agencies to accomplish fuel reduction projects, watershed enhancement, range improvement, and pre-suppression projects that benefit all agencies.

Pre-Fire Management Staff's goal is to minimize the threat of a fire from becoming a large and damaging wildfire. To attain that goal, we must reduce the amount of brush covered lands. We must also develop fuel modification projects in the populated areas to create better defendable spaces and limit the potential for fires to spread from a populated area into the wildland

Pre-Fire Management's focus will continue to solicit local ranchers to participate in VMP to reduce the fuel loading, and reestablish water generation. Fire Safe Councils will be a key partner to determine successful strategies in minimizing our threat to key assets at risk. The success of these projects will depend on support from willing stakeholders, motivated field personnel, and supportive administrative staff. New projects promoting our goals must be developed at the Battalion level. Pre-Fire Management Staff will support these new projects and assist in its implementation. When the number of projects becomes greater than the resources or budget allows, projects will be prioritized based upon their level of threat, stakeholder cooperation, and the realistic ability for the project to make it to completion.

Major Stakeholders Review

The following page lists the vested stakeholders in the Tulare Unit. Each stakeholder has their own reasons for wanting fuel reduction projects. It may be to increase grazing land, make their land more usable for other reasons, or to protect their investments from an uncontrolled fire.

Nature used to keep the forests and rangelands in check with fire. But for over 130 years we have actively suppressed and extinguished these wildfires. This has consequently increased the accumulation of fuels and gradually replaced the once grasslands with brush fields. San Joaquin Air Pollution District has levied a $5.00 an acre smoke mitigation fee that now makes VMP burns very expensive, and has hindered current and future fuel reduction projects. We are looking into other ways to meet the objectives in fuel reduction other than by VMP burns.

There are several ways we can balance the needs for an ecological environment and improve fire safety. Listed below are some of the ways we can obtain our objectives.

- Work with Fish and Game, U.S. Forest Service, BLM and other stakeholders in implementing fuel modification projects, and to keep fire/ flooding damages to a minimum.

- Continue with VMP burns for fuel reduction in the larger areas.
- Use chippers in residential areas and roadside brushing projects. This method is quicker than burning, and reduces the smoke irritants in the air.

- Encourage the local landowner to do preventative maintenance by cleaning their property of the excess fuels, limbing trees, and developing greenbelts as described in PRC 4290.
- Use CDF Tulare Unit, Forest Service, and BLM inspectors to continue to insure PRC 4291 compliance.
- Utilize the Tulare County Fire Safe Council and other local entities to educate homeowners on how they can create a defensible space. This can be accomplished through demonstration projects, talks, and handouts.
- Use the local newspapers and media to inform the public on fire safety and upcoming events.
- Utilize CDF's Team Teaching program and VIP's to teach fire safety in the local schools and at community events.
- Maintain our massive pre-suppression project inventory. These mainly consist of suppression tanks, fire control roads, and fire safe areas. Maintaining existing infrastructure should be the first priority, before development of new projects occurs.

Tulare County Fire Safe Council

The Tulare County Fire Safe Council is currently the only Fire Safe Council operating in Tulare County. They have been active in acquiring grant funding to produce literature on fire safety and community protection, information and fire prevention road signs, and assisting in demonstration projects. They continue to solicit interest and cooperation within the communities that are part of the threatened landscape.

Wildfire Awareness Week takes place the second week of May annually. CDF Tulare Unit, The Tulare County Fire Department and The Fire Safe Council picked a needy resident in a high hazard area that would have a difficult time maintaining their property in the appropriate condition to stop an advancing wildfire. We invited local media to cover the event, as well as place a sign, and distribute fire safe materials within the neighborhood

Crews working during Wildfire Awareness Week, May 2004

The Fire Safe Council has been committed to educating and disseminating fire information to the residents and visitors of the wildland areas. They have established sites placing fire information signs to keep the public informed regarding the status of wildfires and prescribed fires throughout Tulare County.

Fire Safe information sign locate at Balch Park Rd.

Four 4’ X 8’ wooden roadside fire prevention signs were refurbished and updated by the Fire Safe Council to assist CDF Tulare Unit with maintenance of their existing signs.

Kaweah Battalion Fire Prevention sign along Hwy. 198

Participants and Supporters of the Tulare County Fire Safe Council include:

Army Corps of Engineers, Lake Kaweah
Army Corps of Engineers, Lake Success
Battle Mountain Ranch
Bureau of Land Management
California Department of Forestry and Fire Protection
Doyle Springs Association
Fred Wiley
Friends of the Tule River
Jonathan Wagy
Hartland Christian Camp
Hartland Homeowners Association
Natural Resources Conservation Service
Pacific Gas and Electric
Pacific Stihl, Inc.
Ponderosa Homeowners/ Upper Tule Association
Camp KEEP
San Joaquin Air Pollution Control District
Sequoia and Kings National Park
Sequoia Crest Property Owners Association
Silver City Cabin Owners Association
Society of American Foresters, S. San Joaquin Chapter
Southern California Edison
Sugarloaf Homeowners Association
Tulare County Board of Supervisors
Tulare County Cattlemen's Association
Tulare County Farm Bureau
Tulare County Resources Conservation District
Tule River Indian Reservation
Upper Tule Association
United States Forest Service, Sequoia National Forest
Wilsonia Cabin Owners

Assets at Risk

Protecting our local assets remains a concern whether they are man-made such as our communities, or natural like the giant sequoia redwood trees. One way to protect our assets is to plan projects where our fire occurrences are high and the reasons for these starts are known. Tulare Unit maintains a GPS coordinate (lat. & long.) for all fire starts, and maps all fires over ten acres in size in the SRA lands. The waypoints and track files are collected and used to create a data layer. At the end of each calendar year SRA ignition points and shape files are used to maintain accurate fire history and ignition location. Historically our fire starts occurred along the Highway 198 corridor and Highway 190 corridor. The GIS data collected is beneficial to determine specific fire cause locations and can direct prevention / education efforts to match historic ignitions.

Flooding/ Soil Erosion

Another concern in the event of a large and devastating fire such as the Mc Nalley and Manter Fires is the aftermath. Analysis of the topsoil after these types of large fires shows a transformation from good topsoil to a hydrophobic soil. Hydrophobic soil happens when a large fire consumes the brush that has a natural protective wax on the leaves, leaving a waxy residue on the ground. The waxy residue left on the ground can be approximately 2" to 3" in depth and prevents the soil from absorbing moisture. This in turn creates flooding, mudslides and threatens other assets such as animal habitat, fisheries, and our communities. Extensive soil erosion can occur and replace our water supplies with silt, mud, and rocks. Disturbing the top soil is a good way to disperse the waxy buildup and allow moisture to penetrate the soil. After the fire has passed, timber salvage operations is one way to reduce the fuel loading, help restore the land, and disperse the hydrophobic soil.

Timber

Timber is another important asset in Tulare County, especially to the small community of Terra Bella. Home to the Sierra Forest Products, this is one of the few major sawmills left in California. Logging has been a major part of Tulare County since the late 1880's. Redwood, pine, cedar, and oak have been sawed and lumbered to help supply the nation's lumber needs. In 2002, Sugarloaf Mountain Park community went into contract with Sierra Forest Products to reduce the fuel loading in their community by logging. This area was so overgrown that the local Battalion Chief considered the area unsafe for structure protection in the event a large fire threatened the community. After the salvage logs were removed for lumber and other products, the brush was piled and burned during the winter months. Even before the logging was complete, a notable increase in the amount of water flowing in several of the streams was observed. This was due to the lack of competition for the water by the nearby vegetation. This joint adventure created a good defensible space around one community and kept another community in jobs.

Fire History
Generally Tulare Unit's Fire History consists of several small fires and on a rare occasion, a large and damaging fire. Tulare Units last large and damaging fires were the Kaweah fire (1996) and the Case Mt. fire (1987). From that time period to now it should be noted that Sequoia / Kings National Park had the Buckeye Fire (1988), and Sequoia National Forest had the Stormy Complex (1990), the Manter Fire (2000), and the Mc Nalley Fire (2002) which were all considered large and damaging fires.

In 2003 the Tulare Unit had nineteen fires that were ten acres or greater. This was consistent with 2002 which recorded eighteen fires of the same class. Two fires were in excess of 300 acres (Castle & Frazier) which consisted of mainly rangeland. The Dinely fire burned 170 acres along our North border with Sequoia National Park. This fire burned through and threatened homes with amazingly no residences burned. Quick action, aggressive enforcement of PRC 4291, and minimal fuel build up contributed to the success of this fire. The 170 acre perimeter lies within the 1996 Kaweah fire burn.


Dinely Fire, 2003


Media coverage of the Dinely Fire, 2003

Fuels
The fuels in Tulare County range from light grasses in the western end of the county, to giant redwoods in the center portion of the county, to a high desert on the eastern end of the county. Most of the SRA lands protected by CDF are grasslands, type four brush, and areas of timber starting around the 4,000' elevation (see Fuels Map in Appendix). Prescribe fire has been a useful tool in reducing the accumulation of fuels in the Unit. To treat our fuels problem in the Unit, two Vegetation Management Program (VMP) burns were accomplished last year, the Cherokee and the Morgan. Because we completed two VMPs in 2001 and two VMPs in 2002, Tulare Unit is exploring new prospective VMP sites. At this time we have no planned VMP burns for 2003.

Weather
The weather during the fire season is generally hot, with temperatures between 95°-103°, humidity in the low 20s and a light wind about 3-5 mph from the NW. The light wind and somewhat higher humidity has helped in suppressing fires in the unit. The topography of the land is generally flat to the west and becomes steep very quickly from the center of the county to the east. See Fire Weather Map in Appendix.

Current Projects

Tulare Unit is currently maintaining an existing shaded fuel break along the Grouse Valley Fire Control Road. This project is useful as a stand alone fuel break, but it is also being prepped for the east control line of a proposed 1500 acre VMP. Crews from Mountain Home Conservation Camp have been cutting, piling, and burning excess vegetation. Historically most of the fire road easements have been maintained as fuel breaks.

Grouse Valley Fire Control Road / Shaded Fuel Break

Tulare Unit has a long history of taking a proactive stance against accidental fires. Realizing that much of the fire history exists along the major highway corridors and the major recreation areas, we take action to limit the potential of an accidental fire becoming established. A small fuel break 4-6 foot wide scraped down to mineral soil affectionately known as a "Rat Trail" is constructed along the eastern sides of Highways 190, 198, and North Fork Drive. Our target day to have these breaks constructed is Memorial Day due to the extra recreational traffic at Lakes Kaweah and Success.

"Rat Trail" along Highway 198 at Lake Kaweah

FC Bill Hoover in the Fountain Springs Battalion has developed a format for Unit wide Pre-Attack maps. These maps will have information unique to each Battalion e.g.; water sources, access, fuel breaks, pre assigned staging, etc.

Planned Vegetation Management Burns

Batt.	Sponsor	Project Name	Status	Yr.	Project Type	Acres	Grant
11	CDF, FSC	Hartland Fire Safe area	Planning	2005	Fuel Break		N
11	CDF	Badger / Miramonte Fuel Break	Planning	2005	Shaded F.B.		N
11	CDF	Mankin Flat FCR Fuel Break	Planning	2006	Shaded F.B.		N
11	CDF	Shadequarter VMP	Planning	2006	VMP	2500	
11	CDF	Shadequarter / Mankin VMP	Planning	2008	VMP		N
11	CDF	Battalion Fire Prevention Signs	Operational	2004	Info		
11	CDF, FSC	Dry Creek Suppression Tank	Planning	2005	Water Tank	N / A	N
12	CDF	Battalion Pre - Attack Maps	Planning	2005	GIS / Info		N
12	CDF	North Fork "Rat Trail"	Operational	2004	Fuel Break		N
12	CDF	Kaweah Lake "Rat Trail"	Operational	2004	Fuel Break		N
12	CDF	Grouse Valley FCR Fuel Break	Operational	2004 / 2005	Shaded F.B.		N
12	CDF	Grouse VMP	Operational	2004	VMP	1500	N
12	CDF, FSC	Kaweah Batt. Demo Project	Planning	2005	Demo		N
12	CDF	Sheep Creek Suppresion Tank	Maintenance	2005	Water Tank	N / A	N
12	CDF	Salt Creek Suppresion Pond	Maintenance	2005	Water Tank	N / A	N
12	CDF	Battalion Fire Prevention Signs	Operational	2004	Info		
13	CDF	Cow Mountain Fuel Break	Maintenance	2005	Fuel Break		N
13	CDF, FSC	Camp Nelson Demo Project	Maintennace	2004	Demo		N
13	CDF	Rancheria Suppresion Tank	Planning	2006	Water Tank	N / A	N
13	CDF	Wishon Suppression Tank	Maintenance	2005	Water Tank	N / A	N
13	CDF	Success Lake "Rat Trail"	Operational	2004	Fuel Break		N
13	CDF, USFS	Rancheria Fuel Break	Maintenance	2005	Fuel Break		N
13	CDF, USFS, FSC	Pierpoint Fuel Break	Planning	2006	Shaded F.B.		Y
13	CDF	Mountain Home State Forest VMP	Operational	2004	VMP	120	N
13	CDF, FSC	Camp Nelson Fuel Break	Planning	2006	Shaded F.B.		N
13	CDF	Battle Mountain VMP	Maintenance	2007	VMP	120	N
13	CDF	Cow Mountain Suppression Tank	Maintenance	2004	Water Tank	N / A	N
13	CDF	Balch Park RD Suppresion Tank	Maintenance	2004	Water Tank	N / A	N
13	CDF	Dennison VMP	Planning	2008	VMP	600	N
13	CDF	Battalion Fire Prevention Signs	Operational	2004	Info		N
14	CDF	Poso Fuel Break	Operational	2004	Shaded F.B.		N
14	CDF, USFS	Uhl Pocket Fuel Break	Maintenance	2005	Shaded F.B.		N
14	CDF, USFS	Pine Mountain Fuel Break	Maintenance	2006	Shaded F.B.		N
14	CDF	Pine Mountain VMP	Planning	2008	VMP	1600	N
14	CDF	Sandy Creek VMP	Planning	2009	VMP		N
14	CDF	Gibbons Peak	Planning	2009	VMP	1800	N
14	CDF	Battalion Fire Prevention Signs	Operational	2004	Info		
TUU	CDF, FSC	Wildfire Awareness Week Cleanup	Planning	2005	Demo		N

Projects by Battalion

Badger Battalion (11)

Hartland "Fire Safe" area:

- Create a "Fire Safe" area within or adjacent to the community of Hartland to protect the residents from wildfire. The surrounding fuels should be modified to accommodate large groups of residents, including Hartland's school age children who may be left without transportation. The site should have a non-continuous ground fuel bed, open canopy with well spaced conifers free of dead / down litter. Funding for this project could be acquired through available grant programs.

Badger / Miramonte Fuel Break:

- Build a shaded fuel break along the Badger / Miramonte fire control road to provide an area to stop an established wildfire spreading from the Drum Valley / Highway 245 corridor. The Badger / Miramonte FCR is located on advantageous topography to provide a suitable control point to limit a fires spread into populated areas of Tulare and Fresno counties. The fuel break should be void of any continuous chaparral for twenty feet on either side of the road. Trees should be limbed up and thinned to limit spacing as needed. Funding for this project will be minimal and can be absorbed by the Unit(s) for regular fire control road maintenance if there is no available grant funding sources.

Mankin Flat Fuel Break:

- Engineer the fuels along the Mankin Flat fire control road starting at the point where the Davis Spur and Mankin Flat fire control roads intersect. The road is strategically positioned along the ridge which separates the Dry Creek and Sheep Creek drainages. This location would be a valuable control point in containing wildfires which start on either side of it. The fuel break should be void of chaparral for twenty feet on either side of the road, and trees should be limbed up and thinned to limit spacing as needed. This project due to its size, may take several years to implement. Funding for this project to could be acquired through available grant programs.

Shadequarter to Mankin VMP:

- The object of this project is to create a series of burns along the ridgeline that connects Shadequarter Mountain to Mankin Flat. The most important aspect of this project is that it would engineer a significant age class reduction of fuels from Eshom Valley at the edge of our DPA to where the fuels transition to grass / oak woodland. These projects should be completed sequentially from North to South to minimize control difficulties and to limit the amount preparation needed. A maintenance cycle should be established to insure the effectiveness. Funding to be provided through Local, State, and Federal grants, as well as Department funds specifically allocated for this type of project.

Rural area Suppression tanks:

- Construct water tanks in isolated rural areas for fire protection. These tanks would be constructed or placed along existing CDF easements (fire control roads) which are supported by local stakeholders. Targeted areas would be along Drum Valley Road, Eshom Valley Drive / Stage Coach Drive, Lower Dry Creek Rd., Boyd Drive, and Highway 245 in the Elderwood area. The possibility exists to utilize livestock tanks already in place and modifying them for apparatus connections. This project could start as soon as funding becomes available, through acquired existing grant programs.

Kaweah Battalion (12)

Pre-Attack plans:

- Develop updated maps utilizing GIS technology to capture all roads, fuel breaks, water locations, staging locations, and plot probable control lines. Possible strategies for fire suppression could be pre-determined utilizing fire history, typical fire weather and fire behavior models. Distribute the maps so equipment from other stations / areas can efficiently function within the Kaweah Battalion.

North Fork "Rat Trail":

- Construct a 4-6 foot by 4.3 mile long fuel break along the county road right-of-way along the East side of North Fork Drive. This fuel break begins ¼ mile south of the Sheep Creek fire control road and proceeds north to the Cherry Falls recreation area. The fuel break is intended to stop or slow accidental or incendiary road side ignitions, which it has historically done with much success. Funding to be absorbed through normal Unit operating funds due to its minimal expense.

Kaweah Lake "Rat Trail":

- Construct a 4-6 foot by 6.7 mile long fuel break along the state highway right-of-way, on the East side of Highway 198. This fuel break begins at the bottom of "Lemon Hill" at the end of the citrus grove and proceeds east / north east and terminates at the Slick Rock recreation area. This fuel break is intended to stop accidental or incendiary road side ignitions, which it has historically done with much success. This annual project should be completed before Memorial Day.

Grouse Valley FCR Fuel Break:

- Engineer the fuels along the Grouse Valley fire control road to create a shaded fuel break, creating an advantageous control point for fire suppression. The Grouse Valley FCR is located along the East side of our Unit near the SRA boundary. The topography is much more suitable than anything to the east for establishing control lines to protect the homes along South Fork Drive from wildfire established in the confluence of this drainage. The fuel break should be void of any chaparral for 100-150 feet on the downhill side of the road and 50 feet on the uphill side. Trees should be limbed and thinned to limit spacing as needed. Funding for this project to be attached to the Grouse Valley VMP, and maintained through acquired available grant funding.

Grouse Valley VMP:

- This is a 1500 acre VMP located in the upper reaches of the Grouse Creek Watershed. Grouse Creek is a tributary to the South Fork of the Kaweah River. The objectives are to reduce hazardous fuel buildup posed by over 50 year old chaparral, improve grazing conditions, and improve wildlife habitat. The cooperators involved in this project would be; California Department of Fish & Game, and two private cattle ranches. The main environmental issue is air quality to the adjacent community which lies in area considered to be smoke sensitive. Work is in progress and is scheduled to be completed as soon as Department funding, and Air Pollution Control District fee assessments are exempted for this type project.

Kaweah Battalion Demo Project

- Establish an area that is visible to all residents and visitors traveling into the Three Rivers community that will demonstrate the "ideal" fire safe landscaped home. Maintain and publicize this property annually to use as the local model.

Sheep Creek Suppression Tank

- Maintain the 5,000 gallon tank built by CDF in the1950's. This critical piece of infrastructure lies in a remote area where suppression water is difficult to acquire. The tanks maintenance costs are negligible and requires little effort. Maintain the spring box and plumbing to insure the unrestricted flow of water into the tank and stock trough.

Salt Creek Suppression Pond

- Maintain the 5,000-10,000 gallon reservoir built by CDF in the 1950's. This reservoir requires annual brush removal and opening / closing of the head gate to allow filling of water, and removal of sediment. This reservoir is adjacent to the Salt Creek Fire Control road and provides critical water storage in an very remote area.

Tule Battalion (13)

Cow Mountain Fuel Break

- Maintain the pre-engineered fuels along the Cow Mountain Fire Control Road to create / maintain a shaded fuel break, creating an advantageous control point for fire suppression The cow Mountain Fire Control Road lies on the east side of the unit near the SRA / FRA boundary. The fuel break should be void of any chaparral for 100-150 feet on the downhill side of the road and 50 feet on the uphill side. Trees should be limbed and thinned to limit spacing as needed. This project to be funded through Unit funds and available acquired grant funding.

Camp Nelson Demo Project

- Provide annual maintenance to the pre-existing demonstration project below Camp Nelson on Highway 190. The project demonstrates the need for properly spaced trees and removal of all flammable ground fuel from around the residence. This project is important to keep in "pristine" condition as it is viewed by all of the residents in the upper Tule watershed and all of the visitors traveling the Western Divide Highway into Sequoia National Forest.

Rancheria Suppression Tank

- Maintain the 5,000 gallon suppression tank built by CDF in the 1970s adjacent to the Rancheria Fire Control Road. This critical piece of infrastructure lies in a remote area where suppression water is difficult to acquire. This tank requires development of a nearby spring to be able to maintain the tanks capacity. Once this has been accomplished, maintenance requirements should be minimal.

Wishon Suppression Tank

- Maintain the 10,000 gallon suppression tank which sits along Wishon Rd. below the community of Doyle Springs which was built by CDF in the 1990s. This piece of infrastructure is critical in the support and protection of the Doyle Springs cabins. This tank requires minimal annual maintenance.

Success Lake Rat Trail

- Construct a 4-6 foot by 3 mile long fuel break along the state highway right-of-way, on the east side of Highway 190. This fuel break begins at the point where Highway 190 meets the hill near Success Market and proceeds east / north east and terminates at the Success Lake Bridge. This fuel break is intended to stop or slow accidental or incendiary road side ignitions, which it successfully did twice in 2003. Funding to be absorbed through normal Unit operating funds due to its minimal expense.

Rancheria Fuel Break

- Maintain the pre-existing shaded fuel break that runs from Balch Park Rd., east to the Rancheria Fire Control Rd. This break requires annual to semi annual removal of new shrubs, and dead / dying trees brush. Funding to be through available acquired grant funding.

Pierpoint Fuel Break

- Create a shaded fuel break that will be 100 to 300 feet wide and 1 ½ miles long forming a protective ring around the community of Pierpoint Springs and the western side of Camp Nelson. The United States Forest Service is establishing a fuel break on their jurisdictional ground to tie in with our jurisdictions. The break will utilize existing roads, natural openings, and clearance around structures to form an effective control point / belt of engineered fuels. CDF was awarded a grant to accomplish this project and is currently in the process of obtaining agreements from the approximate fifty homeowners involved.

Mountain Home State Forest VMPs

- Introduce prescribed fire into approximately 120 acres of mixed conifer forestland that has been selectively harvested and had fuel reduction through hand pile burning. The areas involved range from 5 to 20 acres and have been selected due to their ability to carry low intensity fire without severely impacting the ecosystem.

Camp Nelson Fuel Break

- Create a shaded fuel break that will be constructed 200 feet wide and 1 ½ miles long around the eastern and southern perimeter of the community of Camp Nelson. This project would be in cooperation with the Unites States Forest Service and multiple private landowners. This project will create a needed buffer between the community and the wildland.

Battle Mountain VMP

- Reintroduce fire to the area previously burned utilizing our Vegetation Management Program Burn. This will be phase two of the 2001 burn to treat the regeneration of chaparral and try and convert the fuel type. Scheduled for 2006 to 2008.

Cow Mountain Suppression Tank

- Maintain the 10,000 gallon suppression tank built by CDF in the1970's. This piece of infrastructure lies in a remote area where suppression water is difficult to obtain. The tanks maintenance costs are negligible and require little effort.

Dennison Peak VMP

- This 600 acre VMP is located eight miles north of the town of Springville on the slopes of Dennison Peak. The objectives are to reduce the fuel loading by burning the fifty to sixty year old chaparral. This would establish an age class change in the fuel to be utilized as a wildfire control point, improve wildlife habitat, and improve livestock grazing conditions. This project would be in cooperation with local ranchers, the United States Forest Service, and several small landowners. This project poses some challenges due to the location of the proposed site in proximity to populated areas within the same drainage in respect to air quality issues.

Balch Park Road Suppression Tank

- Maintain the 10,000 gallon suppression tank built by CDF in the1970's. This piece of infrastructure lies in a remote area where suppression water is difficult to obtain. The tanks maintenance costs are negligible and require little effort.

Fountain Springs Battalion (14)

Poso Fuel Break

- Create a shaded fuel break near the communities of Panorama Heights and Poso Park. The fuel break is a joint venture between the U.S. Forest Service, CDF Tulare Unit and the local residents requiring little cost to those involved. The project consists of limbing trees, removing excess brush, restrict mistletoe spread and disposing of the excess waste by burning or chipping. Most of the treated land is on federal land next to the CDF Poso Fire Station.

Uhl Pocket Fuel Break

- Maintain the Uhl Pocket fuel break that was created in the late 1990's. This fuel break lies on USFS and CDF jurisdictions. Major treatments have been completed and require 10-20 days of cutting and burning / chipping per year to maintain it in a useable condition.

Pine Mt. Fuel Break

- Maintain the Pine Mt. fuel break that was created in the late 1990's. This fuel break protects the community of Pine Flat and lies on USFS land. Major treatments have been completed and require 10-25 days of cutting and burning / chipping per year to maintain it in a useable condition.

Pine Mt. VMP

- This proposed project is a 1600 acre VMP 2-3 miles southwest of the community of Pine Flat. This is mostly on National Forest / Monument lands that lie within CDF's DPA. The objective of this burn is to reduce fuel load, improve wildlife habitat, and improve grazing. The effects of the burn should create a protection zone for the communities of Pine Flat and California Hot Springs.

Sandy Creek Fuel Break

- Construct a shaded fuel break along the Sandy Creek Fire control road to the forest boundary. This will provide a control point for the protection of Poso and Panorama Heights. The fuel break is to be constructed 200' x 1 mile. Project is still in planning stages.

Gibbons Peak VMP

- This proposed project is an 1800 acre VMP 12 miles northwest of California Hot Springs. Roughly 1400 acres are on SRA, and the remaining on BIA land. Contracts and agreements still need to be obtained for all of the cooperators involved. The objective of this burn is to reduce fuel load, improve wildlife habitat, and improve grazing.

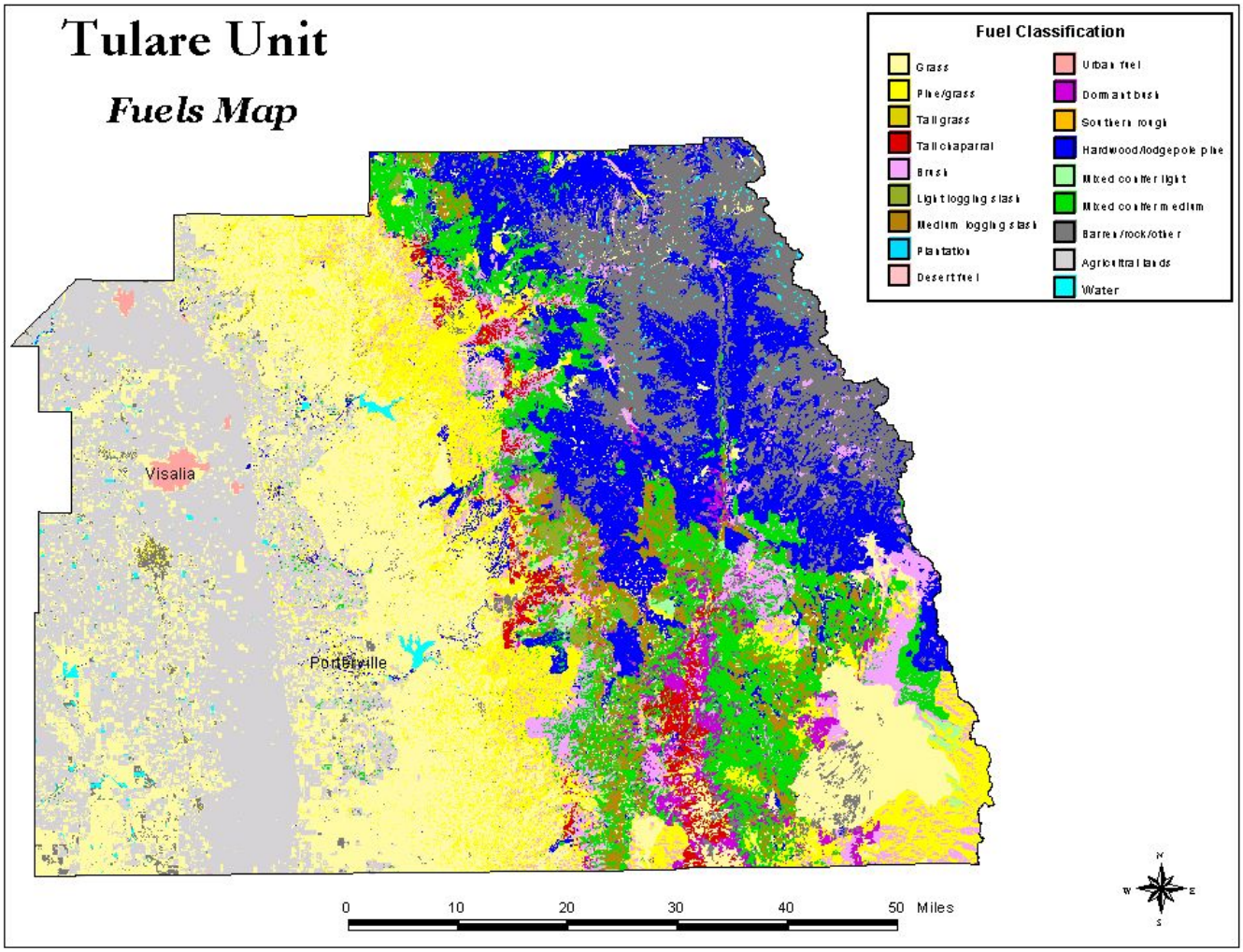
Unit Projects

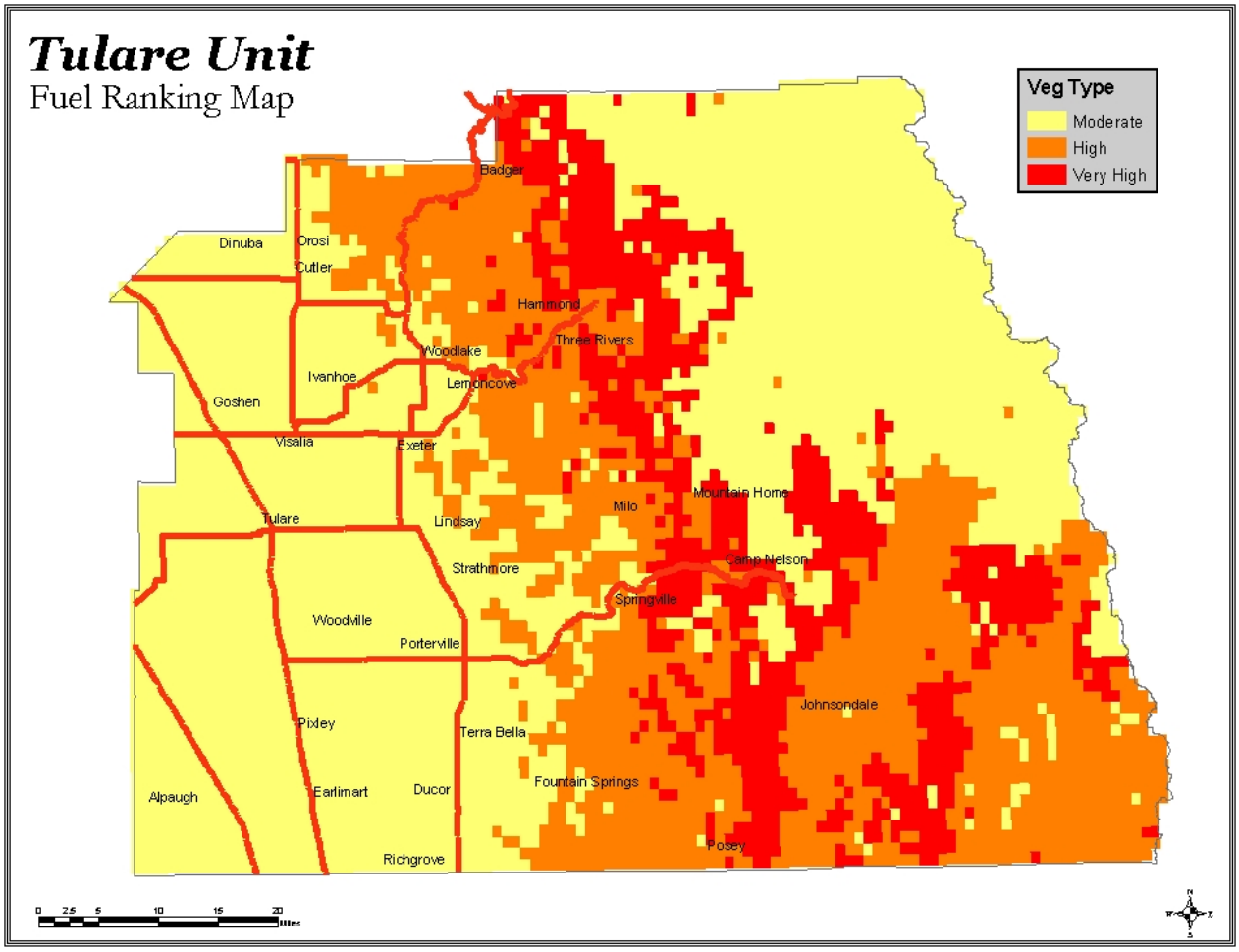
Wildfire Awareness Week Cleanup

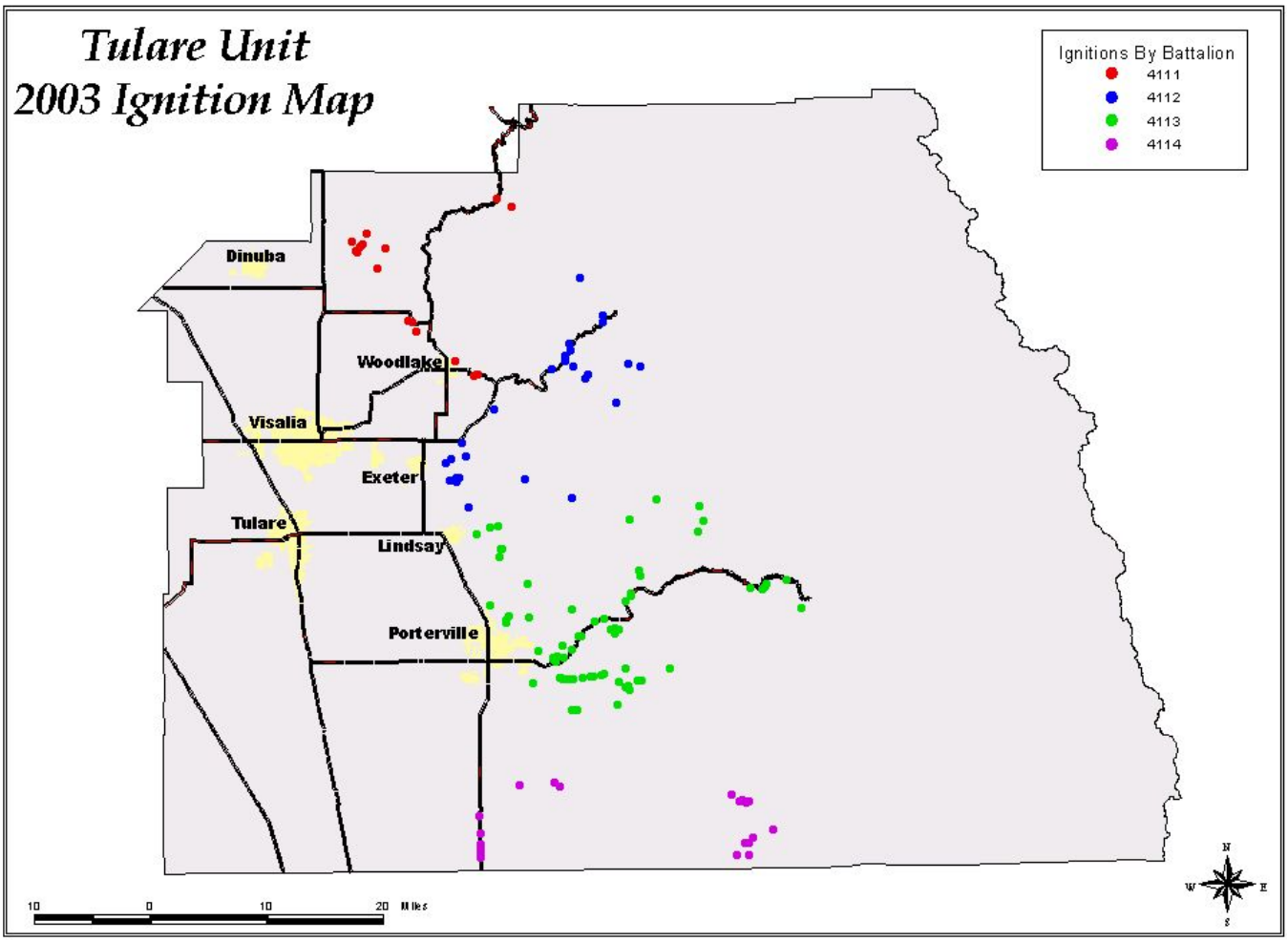
- Identify a residence in each of the Battalions to use as a model for PRC 4291 compliance. Residences should be in a visible area that will benefit the Department by serving as a demonstration project, assist needy individuals within the community, and provide opportunity for local media to chronicle work accomplished.

Battalion Fire Prevention Signs

- Identify by Battalion sign locations and numbers of fire prevention signs. Work with field battalion staff to determine appropriate sign messages for the time of year. Seek out grant funding to maintain and replace dilapidated signs, and sign stands. Obtain a GPS coordinate for each sign location and create a data layer that can be used against our ignition data layer to develop prevention messages to meet the local ignitions.


Tulare Unit
Fuels Map
Fuel Classification
Grass
Pine/grass
Tall grass
Tall chaparral
Brush
Light logging slash
Medium logging slash
Plantation
Desert fuel
Urban fuel
Dormant brush
Southern rough
Hardwood/lodgepole pine
Mixed conifer light
Mixed conifer medium
Barren/rock/other
Agricultural lands
Water
Visalia
Porterville
0
10
20
30
40
50 Miles
N
W
E
S


Tulare Unit
Fuel Ranking Map
Veg Type
Moderate
High
Very High
Badger
Dinuba
Orosi
Cutler
Hammond
Three Rivers
Woodlake
Ivanhoe
Lemoncove
Goshen
Visalia
Exeter
Mountain Home
Milo
Tulare
Lindsay
Strathmore
Camp Nelson
Springville
Woodville
Porterville
Johnsondale
Pixley
Terra Bella
Fountain Springs
Alpaugh
Earlimart
Ducor
Posey
Richgrove
0 2.5 5 10 15 20
Miles

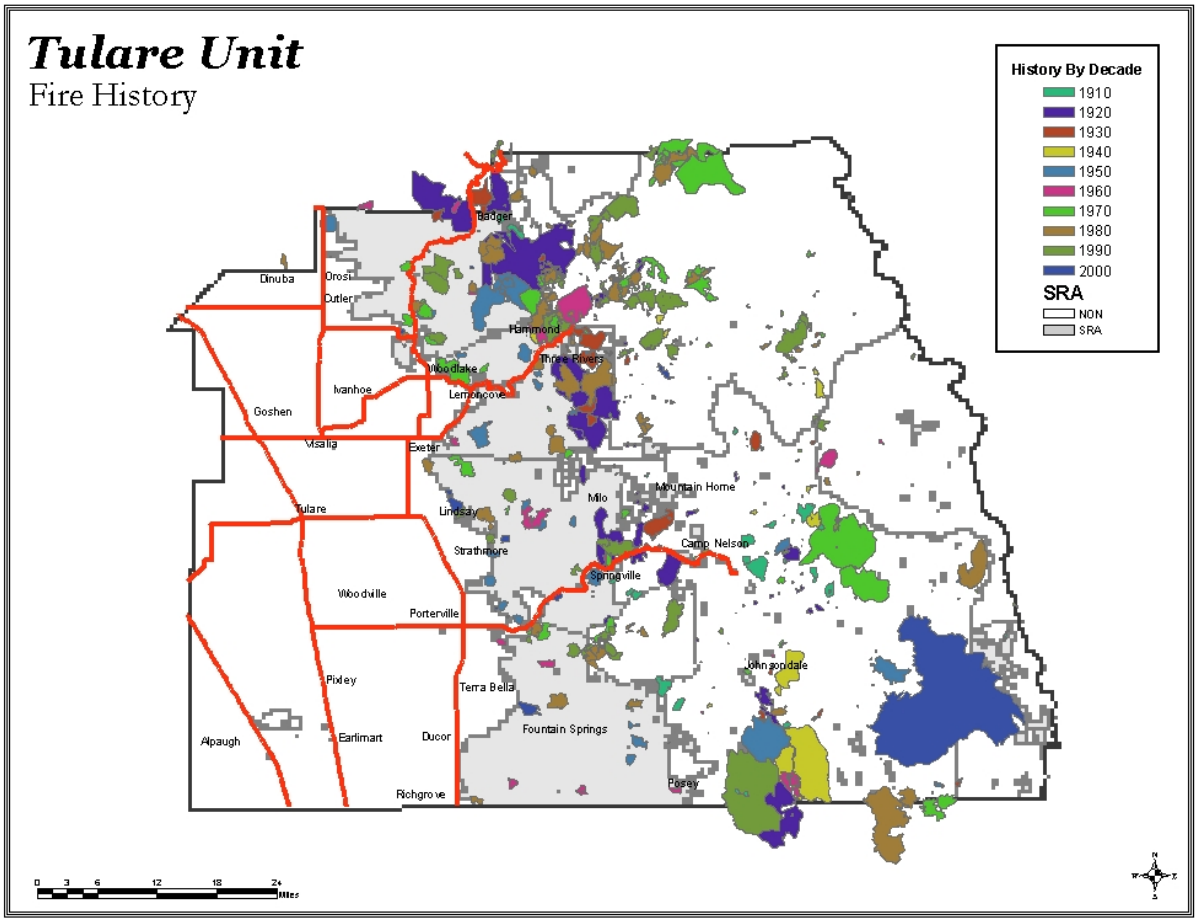

Tulare Unit
2003 Ignition Map
Ignitions By Battalion
4111
4112
4113
4114
Dinuba
Woodlake
Visalia
Exeter
Tulare
Lindsay
Porterville
10
0
10
20 Miles
N
W
E
S

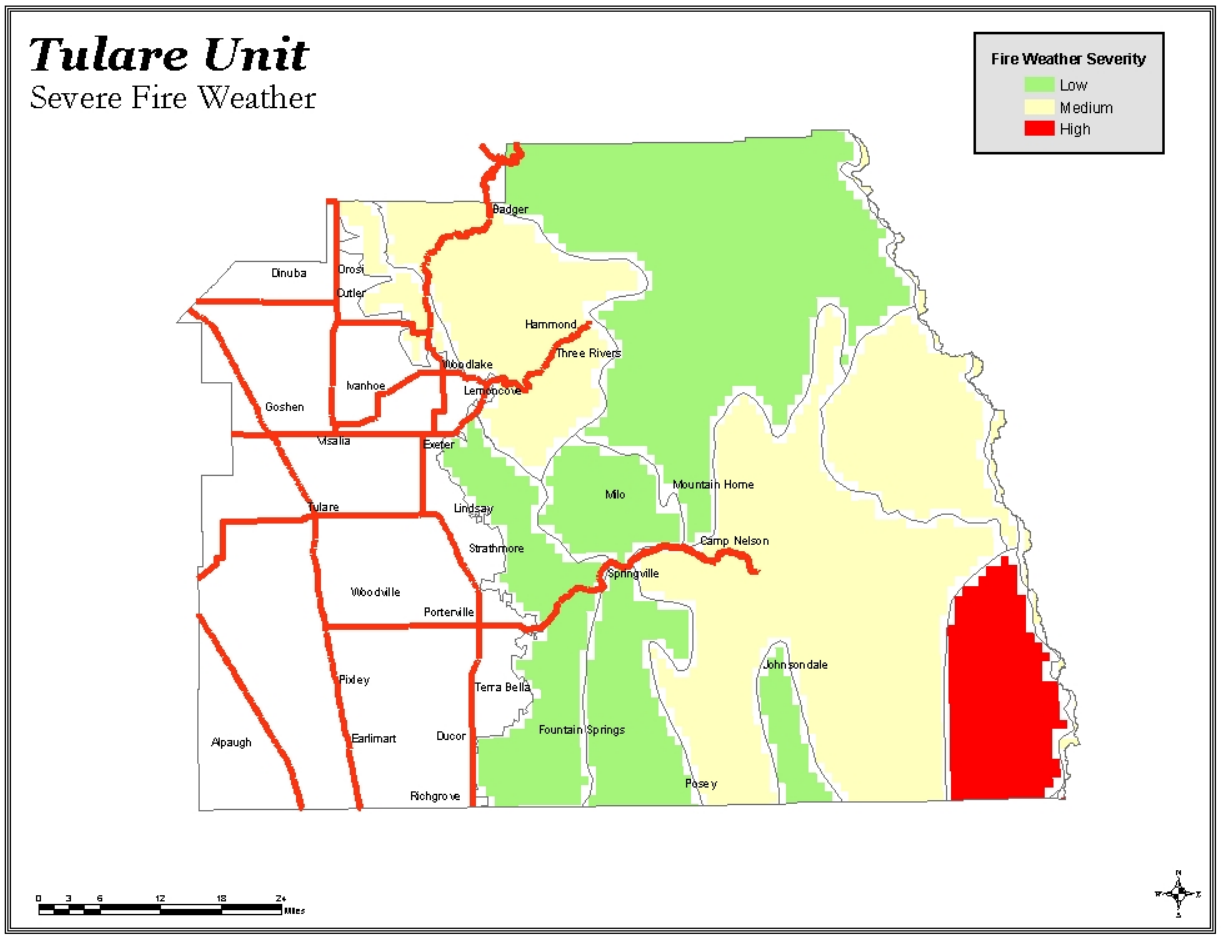
Battalion 11 Fire Causes						
DATE	INC_NUM	FIRE_NAME	LOCATION	TYPE_FIRE	CAUSE	BATTA
06/05/2003	5614	MUD SPRINGS #1	AVE 376 1/4 MI E RD 188	VEGETATION	ARSON	4111
06/05/2003	5617	LOMITAS DRIVE	23412 LOMITAS DRIVE	VEGETATION	ARSON	4111
06/18/2003	6156	COLVIN	19299 AVE 370	VEGETATION	MECHANICAL	4111
06/21/2003	6316	JOHNSON	14883 JOHNSON DR	GRASS	ARSON	4111
06/21/2003	6303	BOYD	42132 BOYDS GRADE	GRASS/DEBR	ARSON	4111
07/03/2003	6905	CANAL	43008 DRIVE 152	GRASS	ARSON	4111
07/07/2003	7181	JOHNSON #1	DIA 152 JWO JOHNSON DR	GRASS	ARSON	4111
07/07/2003	7184	JOHNSON #2	DIA 152 @ JOHNSON DR	GRASS	ARSON	4111
07/12/2003	7410	ROUSHALL #2	RD 152 @ DIA 152	GRASS	ARSON	4111
07/12/2003	7429	CASTLE	WUTCHUMNA & CASTLE ROCK	GRASS	ARSON	4111
08/08/2003	8749	DRUM/TRAVIOLI	DR 152 2 MI N OF JOHNSON	VEHICLE	ARSON	4111
12/22/2003	14447	GARIN	49410 HWY 245	VEGETATION	ILLEGAL BURNING	4111
12/26/2003	14611	YAMAMOTO	16601 AVE 416	STRUCTURE	ELECTRICAL	4111
7/31/2003	8334	LIVINGSTON	49250 STAGECOACH	LEAVES/LIT	ILLEGAL BURNING	4111

Battalion 12 Fire Causes						
DATE	INC_NUM	FIRE_NAME	LOCATION	TYPE_FIRE	CAUSE	BATTA
01/18/2003	624	APCD # 13	35951 YOKPHL VALLEY DR.	TREE DEBR	ILLEGAL BURNING	4112
04/01/2003	3077	LA CROSS	31713 ROAD 246	CHIMNEY	BURNOUT	4112
05/24/2003	5035	HOUSTON	52049 N FORK DRIVE	VEHICLE	FUEL LEAK	4112
06/05/2003	5612	SIERRA	45060 SIERRA KING DRIVE	VEGETATION	POWERPOLE	4112
04/02/2003	3094	BOYLAN	44056 REDBUD TRAIL	BRUSH	ILLEGAL BURNING	4112
06/11/2003	5859	TULARE COUNTY 27	YOKOHL VALLEY 5 MI E RD 2	VEGETATION	ARSON	4112
07/05/2003	7039	LOMITAS	23412 LOMITAS DR	GRASS	ARSON	4112
07/05/2003	7054	DINELEY	44799 DINELEY DR	VEGETATION	POWERLINES	4112
07/09/2003	7289	WARREN	42662 HEIDI DR	LEAVES/LIT	ELECTRICAL	4112
07/22/2003	7911	LIGHTNING	NE SIDE OF CASE MTN	STUMP/LITT	LIGHTNING	4112
07/22/2003	8094	CASE	NE SIDE OF CASE MTN	STUMP/LITT	LIGHTNING	4112
07/29/2003	8225	LOYA	YOHOKL VLLY RD 1 1/2 MI F	VEHICLE	ARSON	4112
07/29/2003	8300	MOUNTAIN	CASE MOUNTAIN	GROUND LIT	LIGHTNING	4112
11/28/2003	13557	CONWAY	43812 SOUTH FORK DRIVE	STRUCTURE	ELECTRICAL	4112
10/28/2003	12346	DOWNS	41500 SIERRA DR	VEHICLE	EQUIPMENT	4112
8/26/2003	9550	SOUTH FORK	46726 SOUTH FORK DR	GRASS	ARSON	4112
9/13/2003	10351	HANSEN	23300 LOMITAS DR	GRASS	ARSON	4112
9/14/2003	10409	CHERRY/BLM#7	CHERRY FALLS PICNIC AREA	GRASS	ARSON	4112
8/17/2003	9126		40716 OLD THREE RIVERS DR	STRUCTURE	REFRIGERATOR	4112
8/06/2003	8630	PAT	41500 SIERRA DR	VEHICLE	EQUIPMENT	4112
6/27/2003	6565	FIREWORKS #3/SLI	SLICK ROCK AREA/39883 SIE	FIREWORKS	FIREWORKS	4112
4/11/2003	3432	FISCHER	40869 SIERRA DR	VEHICLE	MECHANICAL	4112

Battalion 13 Fire Causes						
DATE	INC_NUM	FIRE_NAME	LOCATION	TYPE_FIRE	CAUSE	BATTALION
02/08/2003	1296	FORD	M-112 1/4 MI E OF M-120	VEHICLE	ARSON	4113
04/12/2003	3457	JIMINEZ	1/4 M S OF M-112 ON M-120	VEHICLE	ARSON	4113
01/09/2003	273	WILLIS	52659 BALCH PARK ROAD	STRUCTURE	GAS LEAK	4113
01/23/2003	768	RIPPY	44223 BALCH PARK ROAD	TREE DEBR	ILLEGAL BURNING	4113
01/30/2003	979	OWEN	31832 COUNTRY CLUB DR.	STRUCTUR	SMOKING	4113
02/09/2003	1340	APCD # 34	29148 HIGHWAY 190	DEBRIS	ILLEGAL BURNING	4113
02/11/2003	1394	FALSE ALARM # 4	16361 MUSTANG DRIVE	CHIMNEY	BURNOUT	4113
02/18/2003	1603	RODEO	34698 HIGHWAY 190	ORANGE BIN	OLD BURN IGNITIO	4113
04/02/2003	3106	MURRAY	35496 TULE RIVER DRIVE	CHIMNEY	BURNOUT	4113
04/08/2003	3271	LONGLEY	HIGHWAY 190/VISTA POINT	VEHICLE	HOT ENGINE/ELECT	4113
04/21/2003	3786	GRAY	379 MOUNTAIN DRIVE	CHIMNEY	BURNOUT	4113
04/05/2003	3196	SMITH	2345 N PLANO	BURN VICTU	GAS/HUMAN ERROR	4113
05/24/2003	5018	STATE OF CA#8	HWY 190 S OF PLEASANT OAK	GRASS	VEHICLE	4113
05/25/2003	5090	USFS # 1	USFS RD 21S78	SLASH/VICT	BURNING	4113
06/02/2003	5463	SUCCESS	31814 RESERVATION ROAD	STRUCTURE	A/C MOTOR	4113
06/14/2003	5975	MUSTANG	32793 MAVERICK DRIVE	VEGETATION	MOWING	4113
06/13/2003	5955	SUCCESS	31814 RESERVATION ROAD	VEGETATION	ARSON	4113
05/29/2003	5247	BENNETT	AVENUE 128 & ROAD 268	VEGETATION	ARSON	4113
06/28/2003	6601	VALLEY	SUCCESS VALLEY DR/HWY 190	GRASS	ARSON	4113
07/03/2003	6870	MARKET #1	RES RD 1/2 MI W OR RD 296	GRASS	FIREWORKS	4113
07/03/2003	6872	MARKET #2	RES RD 1/4 MI W OF RD 296	GRASS	FIREWORKS	4113
07/03/2003	6873	MARKET #3	RES RD AT RD 296	GRASS	FIREWORKS	4113
07/03/2003	6874	MARKET #4	RES RD 1/4 MI E OF RD 296	GRASS	FIREWORKS	4113
07/05/2003	7031	CHIMNEY #2	CHIMNEY RD S. OF RES RD	GRASS	ARSON	4113
07/05/2003	7090	ALMOND #1	RES RD. 1/2 MI W OF RD 29	GRASS	ARSON	4113
07/05/2003	7094	ALMOND #2	RES RD 1 MI E OF RD 296	GRASS	ARSON	4113
07/05/2003	7095	ALMOND #4	RES RD 2 MI E OF RD 296	GRASS	ARSON	4113
07/05/2003	7098	ALMOND #3	RES RD 2 MI E OF SUCCESS	GRASS	ARSON	4113
07/05/2003	7099	ALMOND #5	RES RD. NEAR ENTRANCE	GRASS	ARSON	4113
07/08/2003	7233	FRAZIER	29827 AVE 179	GRASS/BRUS	UNDER INVESTIGAT	4113
07/09/2003	7294	POWER	RES RD W OF RD 296	GRASS	ARSON	4113
07/11/2003	7465	HOURT #1	RD 284 & WORTH	GRASS	ARSON	4113
07/13/2003	7472	HOURT #2	RD 284 & WORTH	GRASS	ARSON	4113
07/13/2003	7493	BALCH	BALCH PARK RD	GRASS/BRUS	FIREWORKS	4113
07/20/03	7800		SOUTH TULE RD W OF MILLIO	VEHICLE	ARSON	4113
07/28/2003	8187	PALAMINO	16430 CATTLE DR	GRASS	EQUIPMENT	4113
08/06/2003	8652	ELEPHANT	AVE 232 & RD 228	GRASS	ARSON	4113
08/07/2003	8671	MERRIT	RD 256 N OF REID	GRASS	ARSON	4113
08/07/2003	8676	WADDELL	AVE 220 & RD 244	GRASS	ARSON	4113
08/08/2003	8754	LEWIS	RD 242 & AVE 236	GRASS	ARSON	4113
10/18/2003	11942	IGNACIO	2004 NELSON DRIVE	STUMP/LITT	ILLEGAL BURNING	4113
11/08/2003	12807	LEWIS	PLANO JNO REID	GRASS	ARSON	4113
11/05/2003	12717	HUNTER	1010 SAW MILL RD	VEHICLE	EQUIPMENT	4113
10/20/2003	11974	BEAR	BALCH PARK RD	BRUSH	ARSON	4113
10/08/2003	11472	CAMP	45260 BEAR CREEK RD	TRASH	HOT MATERIAL	4113
10/18/2003	11893	LEWIS	26600 AVE 196	GRASS	ARSON	4113
10/06/2003	11395	VALLEY	SUCCESS VALLEY DR X HWY 1	VEHICLE	EQUIPMENT	4113
10/01/2003	11147	WORTH	WORTH DR 1/8 MI JSO BARTL	GRASS	ARSON	4113
09/28/2003	11045	PRICE	523 MCCOMBER TRACT	STRUCTUR	DISHWASHER	4113
9/21/2003	10762	AUSULAND	1693 COY FLAT DR	DEBRIS	ILLEGAL BURNING	4113
8/19/2003	9227	BALCH	41456 BALCH PARK RD	GRASS	POWERLINES	4113
8/19/2003	9237	PALAMINO	PALAMINO X MAVERICK	GRASS	EQUIPMENT	4113
9/01/2003	9801	FRANCO	92 RESERVATION RD	STRUCTUR	ARSON	4113
09/01/2003	9789	WELLS	1258 HIGHWAY 190	LEAVES/LIT	ILLEGAL BURNING	4113
09/07/2003	10079	OAK	35800 HWY 190	CHAIR	UNDER INVESTIGAT	4113
8/12/2003	8903	GRASS	27400 AVE 150	GRASS	MODLE ROCKET	4113
8/17/2003	9166	STATE OF CA #66	29198 HWY 190	GRASS	ARSON	4113
8/09/2003	8775	WILLIFORD	33221 LOWER GLOBE DR	CHILD	BBQ PIT	4113
8/18/2003	8808	WORTH	WORTH DR X RD 284	GRASS	ARSON	4113
8/07/2003	8674	STATE OF CA #53	HWY 190 AT VISTA POINT	GRASS	ARSON	4113
8/07/2003	8673	STATE OF CA #52	HWY 190 AT VISTA POINT	GRASS	ARSON	4113
7/29/2003	8255	VALLEY	SUCCESS VALLEY DR	GRASS	LIGHTNING	4113
7/13/2003	7501	BALCH PARK 2	37704 BALCH PARK RD	GRASS	FIREWORKS	4113
7/09/2003	7293	SUCCESS	SUCCESS VALLEY DR & RES R	GRASS	ARSON	4113
7/09/2003	7284	POTHOLES	4 MILES UP RES. RD	GRASS	ARSON	4113
7/02/2003	6842	CORP OF ENGINEER	28800 WORTH DR	GRASS	VEHICLE	4113
6/19/2003	6242	ROMAN	29277 RESERVATION RD	GRASS	VEHICLE	4113
6/18/2003	6187	GONZALEZ	1/2 MILE EAST OF 28560 HW	DEBRIS	ILLEGAL BURNING	4113
6/13/2003	5935	POTHOLES	4 MILES IN ON POTHOLES	GRASS	EQUIPMENT	4113
6/09/2003	5763	LOWE	1/2 MILE WEST OF CHIMNEY	GRASS	ARSON	4113
6/10/2003	5822	EDWARDS	24803 AVE 236	DEBRIS	ILLEGAL BURNING	4113
6/02/2003	5448	TRAYLOR	29094 RESERVATION RD	GRASS	ARSON	4113
4/12/2003	3457	JIMINEZ	1/4 MILE JSO M112 ON M120	VEHICLE	ARSON	4113

Battaion 14 Fire Causes						
DATE	INC_NUM	FIRE_NAME	LOCATION	TYPE_FIRE	CAUSE	BATTALION
01/17/2003	526	HACKETT	42283 HOT SPRINGS COURT	STRUCTUR	FIREPLACE ASHES	4114
01/21/2003	702	WILEY	48435 SUGARLOAF LANE	STRUCTUR	BURNING ESCAPE	4114
02/11/2003	1399	BOLEN	45212 SUGARLOAF DRIVE	STRUCTURE	DRYER	4114
05/10/2003	4424	WUCO	405 CEDAR BROOK TRAIL	STRUCTURE	HOT ASHES	4114
05/13/2003	4566	MULLER	28702 AVENUE 56	STRUCTURE	ELECTRICAL	4114
01/14/2003	447	SANTYMIRE	OLD STAGE RD/5 POINTS	VEHICLE	MECHANICAL	4114
02/09/2003	1335	MULLER	42909 CAPANERO OAKS	VEGETATION	FIREPLACE ASHES	4114
07/03/2003	6888	SPRINGS	24096 AVE 92	GRASS	BURNING	4114
12/31/2003	14781	NIXON	45781 SUGARLOAF DRIVE	STRUCTURE	BURNOUT	4114
12/01/2003	14627	FULLER	43863 OLD STAGE RD	GRASS	ILLEGAL BURNING	4114
11/26/2003	13458	BENNETT	5897 RD 260	CHIMNEY	BURNOUT	4114
11/26/2003	13443	WUCO	405 CEDAR BROOK TRAIL	STRUCTUR	HOT ASHES	4114
10/20/2003	11991	SMITHSON	45041 FOREST DR	LEAVES/LIT	ILLEGAL BURNING	4114
10/04/2003	11294	SOUMA	44896 PINE FLAT DR	LEAVES/LIT	ILLEGAL BURNING	4114
8/19/2003	9222	ROSS	982 MELODY LN	TRASH	ILLEGAL BURNING	4114
7/15/2003	7567	SERIES	HWY 65 AT AVE 8	GRASS	WOOD CHIPS	4114
7/15/2003	7568	STATE OF CA #37	AVE 8 - AVE 40	GRASS	WOOD CHIPS	4114
7/15/2003	7595	STATE OF CA #38	AVE 8 - AVE 40	GRASS	WOOD CHIPS	4114
7/15/2003	7596	STATE OF CA #39	AVE 8 - AVE 40	GRASS	WOOD CHIPS	4114
7/15/2003	7597	STATE OF CA #40	AVE 8 - AVE 40	GRASS	WOOD CHIPS	4114
7/15/2003	7598	STATE OF CA #41	AVE 8 - AVE 40	GRASS	WOOD CHIPS	4114
7/15/2003	7599	STATE OF CA #42	AVE 8 - AVE 40	GRASS	WOOD CHIPS	4114
7/15/2003	7600	ZIMMERMAN	AVE 8 - AVE 40	GRASS	WOOD CHIPS	4114
7/15/2003	7601	CARISLE	AVE 8 - AVE 40	GRASS	WOOD CHIPS	4114


Tulare Unit
Fire History
History By Decade
1910
1920
1930
1940
1950
1960
1970
1980
1990
2000
SRA
NON
SRA
Badger
Dinuba
Orosi
Cutler
Hammond
Three Rivers
Woodlake
Ivanhoe
Lemoncove
Goshen
Visalia
Exeter
Mountain Home
Milo
Tulare
Lindsay
Strathmore
Camp Nelson
Springville
Woodville
Porterville
Johnsondale
Pixley
Terra Bella
Alpaugh
Earlimart
Ducor
Fountain Springs
Posey
Richgrove
0 3 6 12 18 24
Miles


Tulare Unit
Severe Fire Weather
Fire Weather Severity
Low
Medium
High
Badger
Dinuba
Orosi
Cutler
Hammond
Three Rivers
Woodlake
Ivanhoe
Lemoncove
Goshen
Visalia
Exeter
Mountain Home
Milo
Tulare
Lindsay
Strathmore
Camp Nelson
Springville
Woodville
Porterville
Johnsondale
Pixley
Terra Bella
Fountain Springs
Alpaugh
Earlimart
Ducor
Posey
Richgrove
0 3 6 12 18 24
Miles

Fire Plan Success Stories

CATUU08673 & 8674

On August 7, 2003 at 02:00 a wildland fire was reported along Highway 190 near Lake Success. Units were enroute back to quarters from a previous wildland fire. The first unit on scene was Mountain Home Crew 5 with FC B Jim Roller. He advised that there were two fires, approximately ¼ mile apart near "Vista Point".

The initial report was that the fires were being held in check by the fuel break. Initial action was taken by the Crew 5 on the first incident, and E-4173 was able to pick up the open flanks of the second fire. Both fires were contained easily with minimum resources due to the fact they were contained between the road and the "Rat Trail". An accidental fire which occurred in the same area at a later date above the "Rat Trail", required substantially more resources and cost tens of thousands more to suppress.

This area is annually treated with a fuel break constructed along the east side of the Highway beginning at the citrus groves to the south and terminating at Success Valley Drive to the north. The fuel break or "Rat Trail" is constructed 4-6 feet wide along the state highway right-of-way.

The story of these fires is not unique. The road side fuel breaks hold accidental and incendiary fires in check almost annually. This treatment method is a fine example of proactive action paying off. This limited amount of protection strategically placed, protects thousand of acres of watershed with minimal amounts of resources.

List of Interested Stakeholders

1. Board of Supervisors, Tulare County
2. Bureau of Indian Affairs, Tule Indian Reservation
3. Bureau of Land Management
4. California Department of Fish and Game
5. California Department of Forestry and Fire Protection, Tulare Unit
6. Camp KEEP, Kern County Schools
7. Conrad Seitz, Property Owner
8. Doyle Springs Homeowners Association
9. Elliot Land and Cattle Company, Rancher
10. Hugh Macklin, Rancher
11. National Park Service, Sequoia / Kings National Park
12. Richard Hyde, Rancher
13. Sequoia Ranch, LLC
14. Sugarloaf Homeowners Association
15. Tulare County Fire Safe Council
16. United States Forest Service, Sequoia National Forest
17. Upper Tule River Association